

Oral Health Disparities in Arizona's Children

dis-par-i-ty – 1. The condition or fact of being unequal.

In 2003, U.S. Surgeon General Richard Carmona issued a *National Call to Action to Promote Oral Health*. This report stated 'special efforts should be made to reduce the health disparities that affect members of certain racial and ethnic groups and people who are poor, geographically isolated or vulnerable because of special oral health care needs.'



The Arizona Department of Health Services, Office of Oral Health, Arizona School Dental Survey 1999-2003¹ found that oral health disparities exist among Arizona school children in grades kindergarten through third.

- What can we learn about these children who experience a disproportionate burden of the disease?
- How can we use this information to target populations and reduce disparities so that all children are ready to succeed?

Concentration of Decay

The burden of tooth decay is not evenly distributed across all segments of society.

- 23% of children experience 74% of the decay.

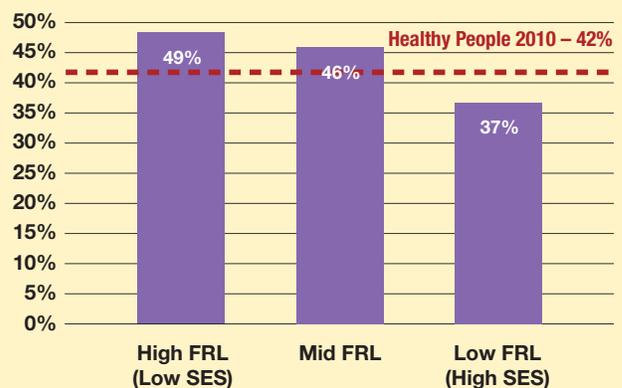
- 43% of children with decay have 5 or more decay and or filled teeth.

Certain indicators are used in determining an individual's risk of experiencing decay. The goal of public health (and society) is to define those indicators so we may target efforts toward underserved and higher risk populations.

Socio-Economic Status

One indicator for risk of tooth decay is socio-economic status (SES). Participation or eligibility to participate in the Arizona's free and reduced meal program is a reliable indicator of socioeconomic status of a school. Children in Arizona who attend schools with a high free and reduced lunch participation (FRL) have a higher prevalence of tooth decay. The prevalence rate is nearly one and a half times higher among lower SES children.

Percent of Arizona Children Who Have Experienced Decay by School Free & Reduced Lunch (FRL) Participation

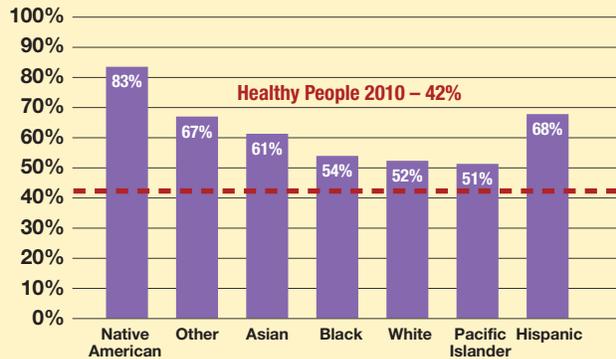


Race and Ethnicity

Another indicator of risk is race and ethnicity. Decay experience for all races is above the *Healthy People 2010* target of 42%. 83% of Native Americans and 68% of Hispanic ethnicity have experienced decay.

¹ Arizona Department of Health Services: Division of Public Health Services, Public Health Prevention Services, Office of Oral Health: Arizona School Dental Survey, 1999-2003.

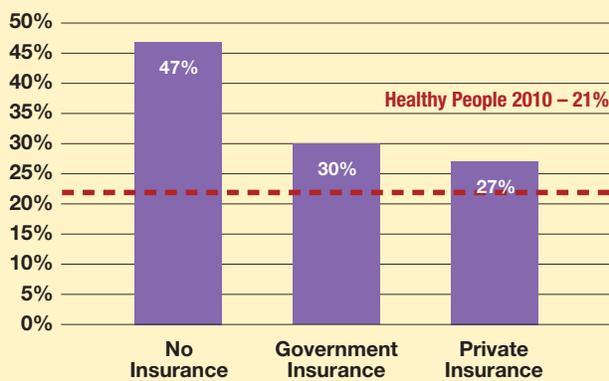
Percent of Arizona Children Who Have Decay Experience by Race and Ethnicity



Access to Care

Not all children have equal access to dental treatment. Nearly one out of every two children (47%) without dental insurance need dental treatment and nearly three out of ten children on government or private dental insurance need treatment. All children, either covered by private or government insurance and children without dental insurance exceed the *Healthy People 2010* objective of 21% for untreated decay.

Percent of Arizona Children Who Need Dental Treatment by Type of Dental Insurance



Many young children already have tooth decay. In addition, not all children are benefiting equally from improvements in oral health care. Tooth decay is a chronic disease that impacts overall health.



Because of the progressive nature of the disease, poor oral health in children can impact their health into adulthood. Research continues to link oral health and the following health problems:

- Diabetes
- Cardiovascular diseases (stroke)
- Premature low birth weight babies
- Failure to thrive

Like these other conditions, prevention of oral disease and tooth decay needs a comprehensive, integrated approach that addresses many factors including:

- **Environment** (*access to community water fluoridation, number of dental providers, transportation*)
- **Personal or social norms/behaviors** (*daily oral hygiene care, diet, oral health IQ, transmission of disease, values about oral health*)
- **Political** (*funding, support for community water fluoridation, competing interest groups, scope of dental practice*)
- **Economic** (*availability/access to dental insurance, costs associated with delivering dental treatment*)

The improvement in oral health for children is not a task that can be accomplished by any single agency, be it the Federal government, State health agencies, or private organizations.

Rather, actions must be developed through collaboration and partnerships involving both public and private groups focused on one common goal – preventing tooth decay in children to ensure a lifetime of optimal oral health.

This is the third in a series of briefs reporting on the oral health of Arizona's school children in kindergarten through third grade. For additional information or to learn how to improve the oral health of children go to:

Office of Oral Health
www.azdhs.gov/cfhs/ooH
 602.542.1866

Funding provided by the Robert Wood Johnson Foundation's State Action for Oral Health Access grant.